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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,762	06/08/2001	Sang-Young Lee	A34350 PCT U	9624
21003	7590	06/02/2004	EXAMINER	
BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			VO, HAI	
			ART UNIT	PAPER NUMBER
			1771	
DATE MAILED: 06/02/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/857,762

Applicant(s)

LEE ET AL.

Examiner

Hai Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) 10-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 4-9, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 96/27633 substantially as set forth in the 10/24/03 Office Action. Hasegawa et al (US 6,127,438) is an equivalent form of WO 96/27633 and relied on as a translation of WO 96/27633. The examiner confirms that claim 19 should be removed and substituted for claim 20 in the 102 art rejections over WO 96/27633 in the 10/24/03 Office Action. Claim 19 was cancelled in the response to Election/Restriction filed on 06/04/03. The art rejections have been maintained for the following reasons. Applicant argues that the Hasegawa film is characterized by the structure of crosslinking polymers within the film while the film of the presently claimed invention has a structure of forming hydrophilic groups on the surface of the film. The arguments are not commensurate in scope with the claims as nothing specific

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about the hydrophilic groups is included in the claims. Applicant argues that in Hasegawa, ionizing radiation is fully performed as to form a crosslinked structure over the whole thickness of film whereas in the claimed invention, ionizing radiation is performed to the extent that the radical is formed only on the surface of the film. The examiner disagrees. Hasegawa also discloses that the ionizing radiation is fully performed as to form a crosslinked structure on the surface of film (column 7, lines 42-44, column 8, lines 36-38, and column 11, lines 5-8). Applicant goes on and states that the amount of irradiation disclosed in Hasegawa and that disclosed in the present invention differs greatly from each other. Since each of the inventions performs irradiation of ionizing radiation under different conditions, films of different structures are formed. Again, the hydrophilic groups is not included in the claims, therefore, the arguments are not commensurate in scope with the claims. The art rejections are thus sustained.

3. Claims 1, 2 and 4-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Exsted et al (US 6,010,776) substantially as set forth in the 10/24/03 Office Action). The art rejections have been maintained for the following reasons. Applicant argues that the microporous material of Exsted is hydrophilic as a result of using the crosslinked oil while the microporous film of claimed invention is hydrophilic as a result of forming a hydrophilic group on its surface. The examiner disagrees. Exsted discloses that the radicals generated from crosslikable oil through the ionizing radiation are able to form

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hydrophilic groups too (column 8, lines 21-25). Exsted teaches the microporous film rendered hydrophilic or wettable with water upon sufficient oxidative crosslinking (column 10, lines 35-39). Likewise, it is clearly apparent that the hydrophilic groups would be inherently present on the surface of the film to render the film hydrophilic. Applicant points out that the radiation energy source as disclosed in Exsted does not directly affect the surface of the microporous material and generates radicals from the crosslinkable oils while the ionizing radiation as disclosed in the claimed invention directly affects the surface of the film and forms hydrophilic radicals. It appears that the ionizing radiation is used to generate radicals from the crosslinkable oils. It is not understood that the surface of the film is not affected by the ionizing radiation as the crosslinkable oil is contained within the film. Accordingly, the art rejections are sustained.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/27633 in view of Nishiyama et al (US 5,480,745) substantially as

set forth in the 10/24/03 Office Action. The same reasons set forth in the paragraph no. 2 is believed to be pertinent.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Exsted et al (US 6,010,776) in view of Jacoby et al (US 5,176,953) The same reasons set forth in the paragraph no. 3 is believed to be pertinent.
7. The 101 claim rejections have been overcome by the present amendment.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on M,T,Th, F, 7:00-4:30 and on alternating Wednesdays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HV

  
ELIZABETH M. COLE  
PRIMARY EXAMINER